

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 November 2004 (25.11.2004)

PCT

(10) International Publication Number
WO 2004/102462 A3

(51) International Patent Classification⁷: **G06K 19/06**

(21) International Application Number:
PCT/IL2004/000413

(22) International Filing Date: 14 May 2004 (14.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
155921 14 May 2003 (14.05.2003) IL

(71) Applicant (for all designated States except US): **PRECISION LOCATION SYSTEMS LTD.** [IL/IL]; P.O. Box 4237, Ra'anana 43100 (IL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **BRAIMAN, Michael** [IL/IL]; 16 Hador Street, 42751 Netanya (IL).

(74) Agents: **SANFORD T. COLB & CO.** et al.; P.O. Box 2273, 76122 Rehovot (IL).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

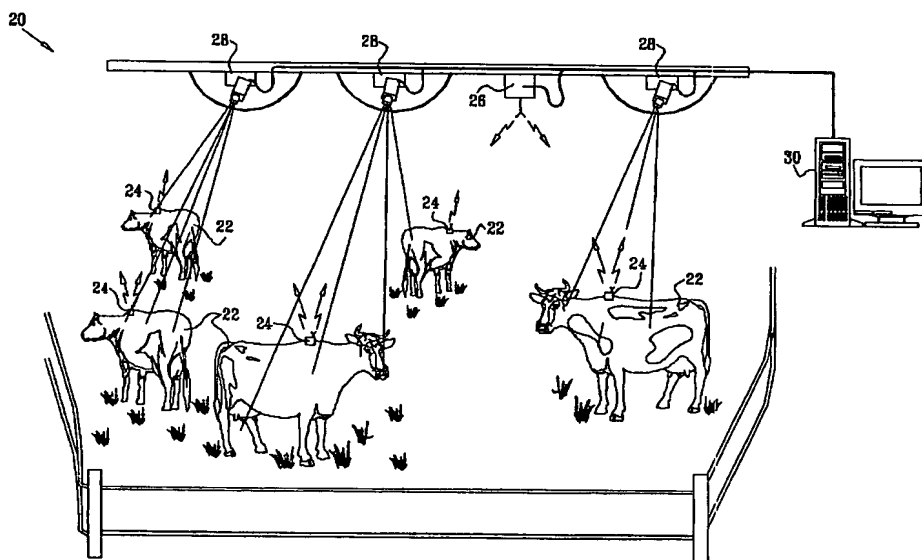
Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
3 February 2005

[Continued on next page]

(54) Title: **TRACKING SYSTEM USING OPTICAL TAGS**



(57) Abstract: A method for identifying objects including fixing tags (24) to respective objects (22), each such tag comprising at least one optical emitter (44, 46, 48). The at least one optical emitter on each of the tags is driven to emit optical radiation of a respective color, selected from among a first plurality of colors emittable by the tags, during a respective time slot, selected from among a second plurality of time slots during which the tags may emit the optical radiation. A camera (28) captures sequence of electronic images of an area containing the objects to which the tags are fixed. The electronic images in the sequence are processed in order to identify, responsively to the colors of the optical radiation emitted by the tags and the time slots in which the optical radiation is emitted, the objects to which the tags are fixed.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.